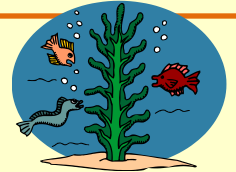




# Georgia Habitats



## Life Science

**S3L1. Students will investigate the habitats of different organisms and the dependence of organisms on their habitat.**

- Differentiate between habitats of Georgia (mountains, marsh/swamp, coast, Piedmont, Atlantic Ocean) and the organisms that live there.
- Identify features of green plants that allow them to live and thrive in different regions of Georgia.
- Identify features of animals that allow them to live and thrive in different regions of Georgia.
- Explain what will happen to an organism if the habitat is changed.

## Regions



## Main Concepts About Georgia Habitats

- A habitat will provide shelter, food, water, and a place to raise young.
- Plants and animals are able to adapt to slow changes in their habitats.
- Animals are able to migrate, hibernate, or relocate to a new area. Animals are also able to move from quick changes to their habitats like fire and flooding.
- If the plants and animals are unable to adapt over a period of time or changes happen too quickly, there could be a decrease in that species' population or possibly even extinction.

Many plants and animals can be found throughout different regions in Georgia due to similar conditions within those regions.

# Vocabulary

**Habitat** - the living environment of animals and plants. A habitat provides a food/water supply, shelter, and a place to raise young.

**Environment** - everything that is around a living thing.

**Ecosystem** - all the living and nonliving things that **interact** in a place.

**Adaptation** - a process that helps living objects to survive in its' environment.

The **2 types of adaptations** are **PHYSICAL** (appearance) and **BEHAVIORAL** (doing things).

**Mimicry** – being able to resemble another animal or object.

**Survive** - the ability to stay alive.

**Trait** - a characteristic, or feature, of a living object.

**Organism** - any living thing.

**Hibernate** - to be in a deep sleep for a long period of time.

**Migrate** - to travel from one place to another and back again for survival.

**Reproduce** - to produce new living things.

**Food chain** - an illustration that shows how energy is passed from one living thing to another.

**Food web** - an illustration that shows how animals are connected in their search for food **within an ecosystem.**

**Producers** -are plants that are able to make their own energy (food). (plants)

**Consumers** are not able to produce their own energy (food). They depend on plants or animals for food. (lions, dogs, humans, etc.)

**Decomposers** get their energy by breaking down and absorbing dead organic matter. (mushrooms, bacteria, worms, buzzards)

## TYPES OF CONSUMERS:

**Carnivore**- meat eaters

**Herbivore**- plant eaters

**Omnivore**- eats plants and meat

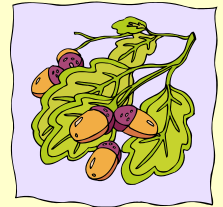




## Mountain Region Characteristics:



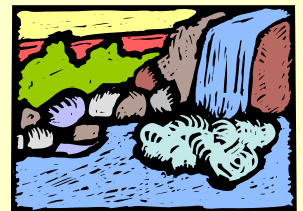
- **Blue Ridge** mountain range of the **Appalachian Mountains**
- **Brasstown Bald**- the highest elevation in Georgia
- Fresh, cool , flowing streams and rivers
- **Only plants and animals that can survive colder weather and higher winds are found here.** (Deer, wild turkey, black bear, birds (with curved beaks to find/eat seeds and short claws to hold on to branches), bats, salamanders, lizards, snakes, frogs, bobcats, gray foxes, beavers, wood chucks, and trout)
- **Upper mountain area:**
  - **Cool and windy** climate at higher elevations (thinner air = less oxygen)
  - **Rocky, thin soil** due to ***weathering*** and ***erosion***
  - **Grasses and flowers** grow better in this area
- **Lower mountain area:**
  - **Warmer** near the bottom of the mountain
  - Less rocks and **deeper, fertile (nutrient rich) soil** due to ***humus***
  - **Trees and shrubs** (bushes) grow better in this area (**Hardwood forest** (maple, oak, magnolia, mountain laurel, and hickory))



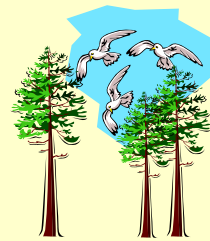
## Piedmont Region Characteristics:



- Piedmont means ***“foothills”***
- Low, rolling **hills** and plains
- **Red clay soil** (due to the mineral ***iron***)
- **Pine trees (soft wood)** and **hardwood forest** (oak and hickory)
- **Lakes** and muddy, **slow moving rivers**, and **waterfalls**
- **Most populated area of Georgia** (Atlanta is located in this region.)
- **Rock outcrops** (granite, marble, and quartz)
- The southern boundary is made up from the ***“fall line”*** (**area of waterfalls and rapids**)
- River otters, opossums, beavers, raccoons, squirrels, deer, birds and birds of prey (owls, hawks, eagles)
- Nocturnal animals that hunt for food at night and sleep during the day due to human population
- Wild animals are being found where people live because their forests are being cut down
- Warm summers and mild winters (very few days of freezing temperatures)



## Coastal Plains Region Characteristics:



- The **largest habitat region in Georgia** that was previously below sea level
- Richmond Hill and Savannah are located in this region
- Georgia's land that is nearest the ocean
- Wide and flat land** that is made of a **sandy loam soil** that is great for **agriculture** (growing food)
- Summers are hot and winters are mild
- Wild hogs, rabbits, deer, snakes, squirrels, turtles, alligators, & **pocket gopher** (near extinction)
- Water birds will be found near the coast or near rivers and large lakes/ponds
- Live oak and pine trees**, Spanish moss, and a large variety of plants



## Swamp and Marsh Region Characteristics:

- The Swamp and Marsh Region are **located in the Coastal Plains**.
- Summers are hot and winters are mild
- There are more alligators in this area than there are people



### Swamps:

- Okefenokee Swamp –"Land of Trembling Earth" (Fresh water swamp)
- Still**, pure, clean, shallow water even though it appears dirty
- Shaded, soft, wet land with a **nutrient poor quality of soil** (little nutrients)
- When plants die, layers of "**peat**" are built up
- Prairies- open area with shallow water and tall grass where most of the animals live
- Lakes and islands
- Giant tupelo and bald cypress hammocks (clusters of wide based trees), pitcher plant, sundew, and bladderworts (insect eaters)
- Alligators, snakes, lizards, turtles and frogs live here- **they are able to survive the constantly changing water levels**
- Black bears, deer, fox, bobcats, and raccoons
- Ducks and other birds with long pointed beaks to help spear fish (herons, kingfishers, cranes, and the white ibis)



### Marshes:

- have salty, **tidal water** (changes levels based on tides)
- Cord grass
- Estuaries**- Breeding area and home for fish, crab, clams, oysters and shrimp (our seafood supply)



## Coast and Atlantic Ocean:

- Located directly off of the coastal beaches of Georgia
- **Plants that can tolerate salt and be grown in sand:** sea oats , morning glory, cord grass, and cabbage palms
- **Phytoplankton**- important “producers” in this habitat- **are the base of the ocean food chain**
- **Saltwater**- based habitat that allows fish, seaweed, plankton, sea turtles, and other sea organisms to live.
- Summers are hot and winters are mild
- Manatees, right whales (endangered species), loggerhead sea turtles, and dolphins
- Seagulls (some sea birds can drink seawater by getting rid of the extra salt through their noses)
- Home for fish, crab, clams, oysters and shrimp (our seafood supply)

